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SIXTH ANNUAL REPORT OF THE DIRECTOR.

SUBMITTED TO THE TRUSTEES JAN. 9, 1895.

To the Board of Trustees of the Missouri Botanical Garden:

The following report on the Missouri Botanical Garden and the Henry Shaw School of Botany is respectfully submitted, in compliance with the rules of the Board:—

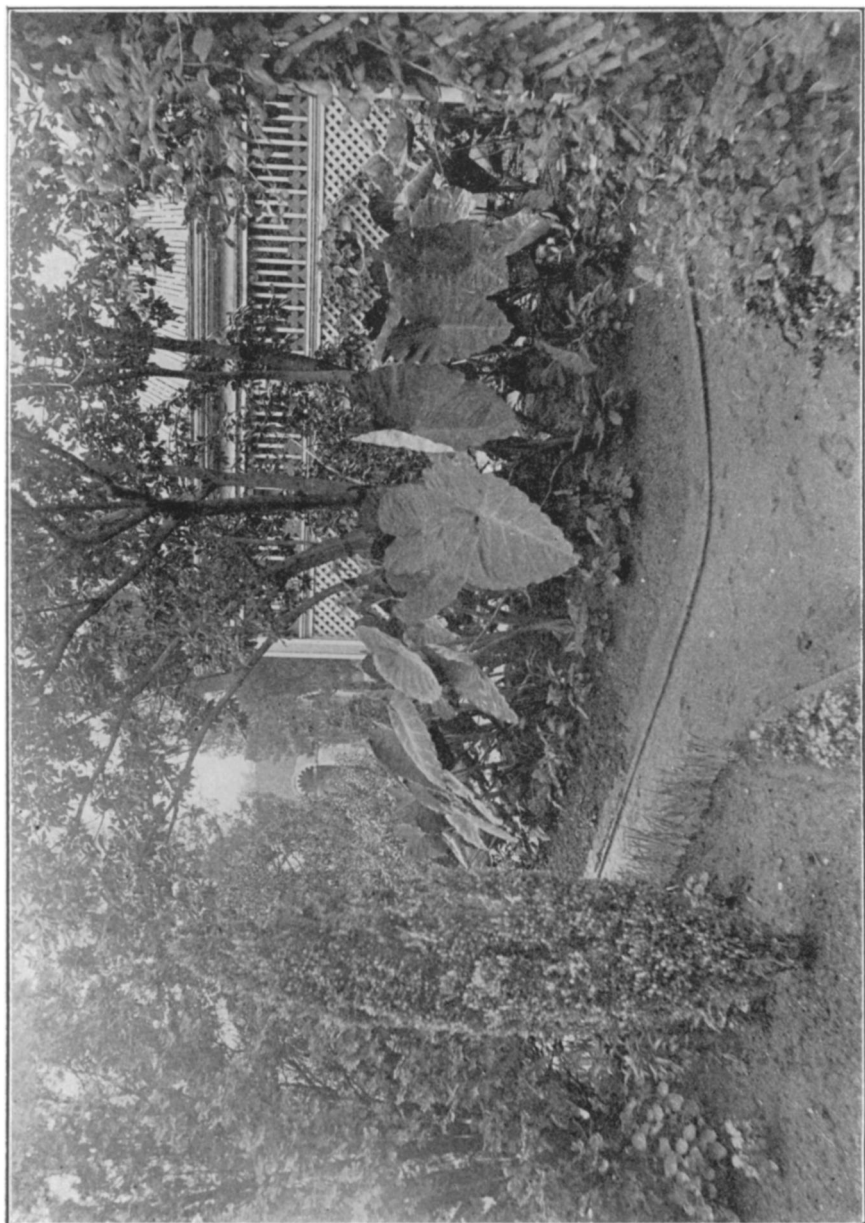
THE BOTANICAL GARDEN.

During the past year the number of visitors to the Garden is reported by the gate-keeper to have been somewhat greater than in 1893, and the Head Gardener, who has been familiar with the Garden for many years, estimates that about one-third more persons now visit the grounds than was the case a few years ago, — an increase partly due to the increased facilities which now exist for reaching the Garden, and, perhaps, in part to the attractions which have been added during the last few years. On the open Sunday afternoon in June, 20,159 visitors were noted, and on the open Sunday in September, which was showery, about 15,500. As in previous years, the visitors on these Sundays were orderly and apparently well disposed. During the year, visitors have purchased 256 copies of the little handbook of the Garden offered for sale at the gate.

In the second paragraph of the first clause of his will,* the founder of the Garden directs that the Garden shall be kept open during such hours, and under such regulations as the Trustees shall prescribe, “every day except Sundays, for the use of the public at large.” In the thirty-fourth paragraph of the fourth clause of the same instrument,† he adds: “In the first clause, and second

* First Garden Report, p. 32.

† l. c. p. 51.



COLOCASIA ANTIQUORUM.

paragraph of this my last will and testament, I devise and express my wish that the garden shall be kept open, under necessary regulations, Sundays and holidays excepted, every day of the week. Now as this Trust is made for the use of the citizens of St. Louis as well as the public in general; it is my wish that for the convenience of said citizens and public, that the Garden shall be open to visitors two Sundays in each year, viz, the first Sundays in June, and the first Sunday in September, from Two P M to sunset." During the later years of Mr. Shaw's life, it was his custom to close the Garden on Sunday, but for the convenience of strangers in the city unable to visit the Garden on other days, he issued a limited number of Sunday cards, each admitting from one to four persons, and also allowed the occasional visits of a larger number. Such permits have been given in a few instances since the death of Mr. Shaw, but it has always been questionable whether they were strictly possible under the power conferred on the Trustees by Mr. Shaw's will, which by implication directs that the public as a whole and also individuals shall be refused admittance on Sundays and holidays; and, however much they may regret the necessity for so doing, the Board of Trustees have decided that under the instructions contained in the will they have no option except to close the Garden on Sundays and holidays (except the Sunday afternoons mentioned above), to individual visitors as well as to the public as a whole.

The general decorative features of the grounds were maintained through 1894 on substantially the same lines as in the preceding year, though somewhat more color was introduced, especially near the main entrance. A collection of economic fiber plants, in the northwestern part of the Garden proper, was made a special feature this year. Although for a time during the extreme drought of the summer, the lawns suffered greatly, the Garden has been kept in a fairly attractive condition through the season. The average number of laborers (including seven garden pupils) was 37, and

the pay-roll for the year aggregates \$14,096.62, of which a considerable sum was expended for necessary repairs to greenhouses and other structures.

Some years ago an effort was made to cultivate undershrubs and other small plants at suitable points in the arboretum, by the establishment there of a wild garden.* Owing to the severity of the seasons and the extent to which the closely set trees of the arboretum have taken possession of the soil, this feature has not added to the attractiveness of the Garden as largely as was hoped, but there is seldom a time during the open season when the wild garden and bog do not contain a considerable number of interesting plants in bloom, and it is hoped that their success may be increased in the future. The droughts which have prevailed during the past five summers, and the impervious subsoil, have continued to weaken the older trees, especially conifers, so that, as was stated a year ago, it is probable that few of the latter will survive many years longer; and a very severe frost, coming when the earlier species were beginning their vegetation last spring, killed outright many trees, such as the weeping willows, while it paved the way for further harm during the exceptionally hot and dry summer which followed. Where they are needed, other trees are being planted to make good the losses from these causes, but it is difficult to successfully grow a new tree on the spot from which an old one has been removed, and a more general clearing and tasty replanting will become necessary within a few years.

The most generally attractive features added to the grounds this year are a series of new granitoid lily ponds, one of which, situated south of the Linnean house, was planned for the growth of the *Victoria Regia*, or Amazon water lily. The decorative effect of these ponds was very considerable, and they were the source of favorable comment by the press of the city and by visitors. A much

* Third Report, p. 13.

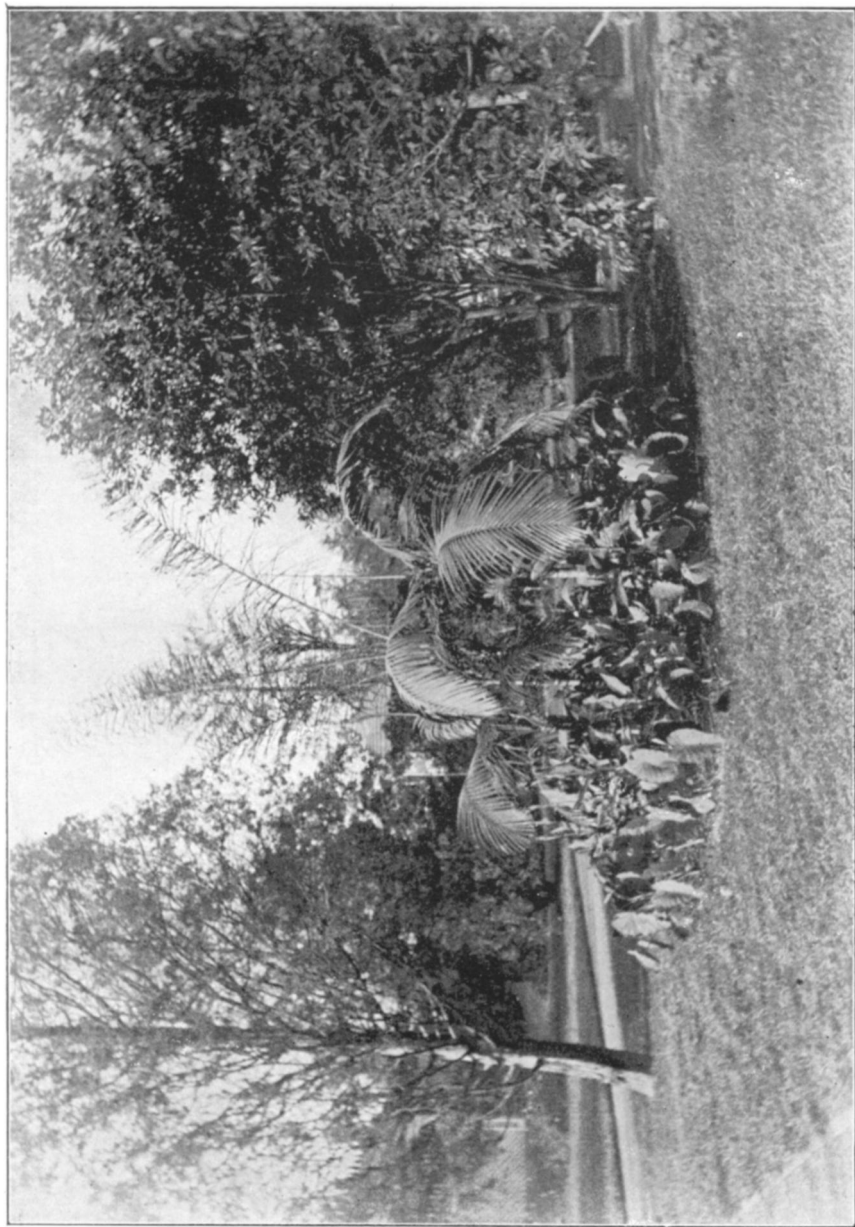
needed plant house, 21 × 97 feet, was erected in the summer, just south of the *Victoria* pond, and is adding greatly to the attractiveness of the Garden through the winter. Numerous minor improvements have been reported to the Board in detail, month by month.

The fruticetum, reported on at various times in the past,* has been further improved this year by the removal of all of the old and worthless apple trees and grape vines and the laying of 1,630 feet of drain tile, and is to be largely replanted in the spring to carefully selected varieties of fruit. The appearance of this inclosure has been greatly enhanced by the replacement of the dilapidated picket fence separating it from the arboretum, by a neat open wire fence. It is hoped that these horticultural improvements may be extended by the erection in the near future of a much needed vegetable forcing house, with a grapery compartment.

During the year, some 950 packets of seeds and 1,000 plants have been received by way of donation or exchange, and 850 packets of seeds and a few dozen plants distributed. The largest of the accessions consisted in 952 plants, many of them of great value, received from South Park, of Chicago. A limited number, aside from bulbs and other transient plants, have also been added to the Garden by purchase. Some 26,900 bedding plants were propagated at the Garden for out-of-door decoration, — an increase of some 6,000 as compared with the preceding year. On the approach of winter, some 1,100 of these were taken from the ground and potted, and distributed to charitable institutions and poor homes in the city, through the kindness of the Bethel Association, to whose officers I wish to express my indebtedness.

While much remains to be desired, the labeling of the plants of the Garden is being greatly improved each year, and I hope that it will not be long before every plant will

* Garden Reports, ii. 18-20, 30; iii. 12.



A TROPICAL BED.

be correctly and legibly named. The enamel (granite ware) tree labels which were at first tried have not proved satisfactory, for several reasons, and trees of sufficient size are now receiving zinc alloy labels cast with raised letters, and affixed by two pins in a vertical line, so as to admit of the expansion of the tree during growth. For the smaller plants, celluloid labels, lettered with a special ink, have been employed very largely, and present a neat appearance when wired to the plants or fastened before them; but it has thus far proved to be impossible to letter them so as to insure permanency, and experiments are being tried in the hope of securing labels combining durability and attractiveness with reasonable cost.

The herbarium has been increased by the incorporation of 9,307 sheets of specimens, of which 3,567 sheets were purchased, 126 belonged to the Bernhardt herbarium, and 5,614 were received by donation or exchange. 208 mounted sheets of duplicates from the Engelmann herbarium, and 12 mounted duplicates from the general herbarium, besides about 1,000 unmounted duplicates, have been distributed to correspondents by way of exchange. As now constituted, the herbarium contains the following collections:—

The Engelmann herbarium (all groups), about..... 97,800 specimens.
The general herbarium of higher plants:

The Bernhardt herbarium..... 61,120

Other specimens..... 54,687

115,807 “

The collection of Thallophytes:—

The Bernhardt herbarium..... 126

Other specimens..... 17,794

17,920 “

Making a total of about..... 231,527 “

During the year \$1,720.11 was spent for purchases and binding for the library, the additions to which consist of 373 books and 166 pamphlets purchased, and 379 books, valued at \$733.95, and 999 pamphlets, valued at \$207.65,

donated or received by way of exchange. Sixty large volumes of Dr. Engelmann's manuscript notes and sketches are appraised at \$600.00. An indexer has been kept steadily employed during the greater part of the year on the card index of plant illustrations in the library; and the card index of Experiment Station literature published by the United States Department of Agriculture, and a set of index cards referring to recently published plant names, have been added by purchase. It is estimated that the card indexes at the library now number about 110,000 cards appraised at \$1,100.00, exclusive of the authors' catalogue of books and pamphlets. Exclusive of the Sturtevant prelinnean collection of about 460 volumes, which has not yet been appraised and added to the capital stock account, the library now contains:—

Books..... 7,631

Pamphlets.. 9,822

Together. 17,453 works, and 110,000 index cards, valued at \$29,630.23.

I have been assisted in office and similar work by Mr. J. C. Whitten, Horticultural Assistant, Jared G. Smith, Botanical Assistant, Miss Grace E. Johnson, Artist, Eva M. Reed, Indexer, and C. E. Hutchings, Amanuensis. In October, Mr. Whitten left the Garden to accept the professorship of horticulture at the Missouri State University, and his place has been filled by the appointment of Mr. H. C. Irish, of the South Dakota Agricultural College. In addition to the necessary routine work, time has been found for a certain amount of research work by Mr. Smith and myself, and phenological notes were also made through the year by Mr. Whitten, and by garden pupils under his direction. Several papers embodying the results of such work are now in preparation. The Garden table at the Wood's Holl Marine Biological Laboratory was again used this year by Mr. M. A. Brannon, who informs me that his studies on *Grinnellia* are now so far

completed that they will soon be ready for publication. Through the summer, I utilized a four months' leave of absence by visiting the Azores, where a large collection was made, quite fully representing the flora of these islands, and adding somewhat to what was known of the distribution of species through the groups of islands. This collection is now being worked over by me, and may, perhaps, form the subject for a paper to be published in the seventh Garden Report. Mr. Smith is at present devoting a portion of his time to a study of the Capsicums which have been cultivated and collected during the past three years, and toward which study Dr. E. Lewis Sturtevant contributed his valuable sets of notes, drawings, and specimens in 1892.*

Four annual events have taken place in the manner directed in Henry Shaw's will: namely, the preaching of a sermon on the wisdom and goodness of God as shown in the growth of flowers, fruits, and other products of the vegetable kingdom; the fifth banquet to the Trustees of the Garden and their invited guests; the fifth banquet to the gardeners of the institution and invited florists, nurserymen and market gardeners; and the award of premiums or prizes to a flower show or exhibition.

The flower sermon was preached in Christ Church Cathedral, St. Louis, on the morning of May 13, by Right Reverend T. F. Gailor, Assistant Bishop of Tennessee.

The Trustees' banquet was given at the Mercantile Club of St. Louis, on the night of May 18, and was presided over by Professor H. S. Pritchett, President of the Academy of Science of St. Louis. Covers were laid for about seventy-five persons. Among those present were: —

J. C. Arthur,
Purdue University.
O. D. Ashley,
New York.

Shepard Barclay,
Jefferson City, Mo.
C. C. Hemenway,
Pritchett Institute.

* Fourth Garden Report, p. 15.

F. C. Hicks, University of Missouri.	Henry King,
R. H. Jesse, University of Missouri.	Jacob Klein,
T. H. McBride, University of Iowa.	W. H. Lee,
Conway MacMillan. University of Minnesota.	J. M. Leete,
Oren Root, Hamilton College.	Geo. E. Leighton,
E. M. Shepard, Drury College.	R. E. MacMath,
W. von Streeruwitz, Austin, Tex.	W. C. Marshall,
F. E. Nipher,	Albert Merrill,
C. R. Sanger,	N. O. Nelson,
E. H. Sears,	Byron Nugent,
M. S. Snow, of Washington University.	Charles Parsons,
George D. Barnard,	Julius Pitzman,
Adolphus Boeckeler,	Thomas C. Purdy,
W. W. Boyd,	P. G. Robinson,
J. P. Bryson,	R. E. Rombauer,
M. Dwight Collier,	O. U. von Schrader,
F. M. Crunden,	W. L. Sheldon,
Thomas Dimmock,	Wm. Short,
Daniel Dillon,	F. L. Soldan,
Daniel D. Fisher,	Charles Speck,
S. W. Fordyce,	E. O. Stanard,
D. R. Francis,	S. S. Sumner,
Fred. Gabel,	Edwards Whitaker,
W. C. Glasgow,	O. L. Whitelaw,
C. S. Greeley,	W. G. Williams,
John Green,	James Withrow,
Henry C. Haarstick,	of St. Louis.
James Hagerman,	F. W. Brockman,
Edwin Harrison,	W. S. Chaplin,
Charles M. Hays,	Geo. S. Drake,
E. A. Hitchcock,	Henry Hitchcock,
W. L. Huse,	D. F. Kaime,
F. L. James,	R. J. Lackland,
J. E. Kaime,	H. S. Pritchett,
	D. S. Tuttle,
	Jas. E. Yeatman,
	Trustees of the Garden.
	A. D. Cunningham,
	Secretary Board of Trustees.
	Wm. Trelease,
	Director of the Garden.

After the dinner, toasts appropriate to the occasion were gracefully proposed by the chairman, and responded to fittingly by President R. H. Jesse, of the University of

Missouri, Professor Oren Root, of Hamilton College, President O. D. Ashley, of the Wabash Railway, and Dr. John Green and the Reverend William Short, of St. Louis.

The gardeners' banquet was given at the Mercantile Club of St. Louis, on the night of November 5, and was presided over by the Director of the Garden. About seventy-five guests were present, among them:—

A. G. Fehr, Belleville, Ill.	Julius Pitzman,	
E. W. Guy, Belleville, Ill.	C. C. Sanders,	
A. S. Halstead, Belleville, Ill.	Carew Sanders,	
G. E. Meisner, Bushberg, Mo.	Wm. Schray,	
A. Nelson, Lebanon, Mo.	J. W. Schuette,	
E. A. Riehl, Alton, Ill.	R. F. Tesson,	
Homer Riggle, Columbus, O.	A. Waldbart,	
O. C. Simonds, Chicago, Ill.	N. J. Wellhouse,	
J. F. Stinson, Fayetteville, Ark.	J. F. Windt,	
A. L. Vaughan, Chicago, Ill.	C. W. Wors,	
G. A. Washburn, Bloomington, Ill.	Harry Young,	
J. C. Whitten, Columbia, Mo.		of St. Louis.
R. W. Ayres,	J. W. Branch,	
J. J. Beneke,	F. W. Brockman,	
H. W. Chandler, Jr.,	R. J. Lackland,	
N. J. Colman,	D. S. Tuttle,	
C. L. Connon,		of the Board of Trustees.
Chas. Connon,	A. D. Cunningham,	
J. M. Connon,		Secretary of the Board.
J. W. Dunford, Jr.,	O. L. Simmons,	
Wm. Ellison,	C. H. Thompson,	
F. J. Fillmore,		of the School of Botany.
R. Frow,	Thomas Doss,	
Wm. Hackman,	J. W. Dunford,	
J. C. Jannopoulos,	Philip Giebel,	
J. M. Jordan,	Jas. Gurney,	
C. A. Juengel,	C. E. Hutchings,	
Wm. Klockenkemper,	H. C. Irish,	
John Koenig,	C. I. Paige,	
Julius Koenig,	J. M. Paige,	
C. A. Kuehn,	J. P. Pillsbury,	
Geo. Longman,	Chas. Schmidt,	
Leonard Matthews,	J. G. Smith,	
Fred Meister,	Geo. Stockey,	
E. H. Michel,	Wm. Trelease,	
F. W. Ostertag,	Mike Zavadil,	
Henry Ostertag,		of the Botanical Garden.
Wm. Pape,		

In response to toasts proposed by the chairman, short and apt speeches were made by Mr. O. C. Simonds, of Chicago, President of the American Association of Cemetery Superintendents, Professor J. C. Whitten, of the University of Missouri, President F. W. Brockman of the St. Louis School Board, and Messrs. Leonard Matthews, Julius Koenig, and Julius Pitzman, of St. Louis.

The award of flower premiums for 1894 was again intrusted to the Florists' Club of St. Louis, for the benefit of a chrysanthemum show held in the Exposition Building, St. Louis, November 6 to 9. Some of the premiums were not competed for, and were consequently not awarded, and the exhibition judges decided that none of the plants competing for the gold medal founded in 1893 were sufficiently meritorious to justify the award of the medal.

The object of Mr. Shaw in providing for "premiums or prizes to a flower show or exhibition * * * established by amateurs and horticulturists of St. Louis," evidently was to stimulate public interest in floriculture, to improve and increase the variety of plants used in St. Louis, and to stimulate and assist florists in their efforts to create and supply a demand for decorative plants. In approving the suggestions of the Florists' Club for a list of the Shaw premiums each year, an effort has therefore been made so to shape the list as to add to the general attractiveness of the exhibition and at the same time also to familiarize the public with new or easily cultivated plants not usually to be seen in the local florists' windows. It was in the hope of bringing to these St. Louis exhibitions newly introduced plants, as well as to stimulate the importation of such plants, that in 1893 the Board of Trustees of the Garden founded "the Henry Shaw Medal for the introduction of a valuable plant," open to competition in any line of decorative horticulture, but to be awarded only "for a plant of decided merit for cultivation, not previously an article of North American commerce, and introduced to such commerce by the exhibitor during the year in which said award

is made," * and it is hoped that importers and originators of new plants of merit will be encouraged to compete for this medal by the precedent established this year by the Florists' Club in refusing an award except in case of very decided merit, in conformity with the wishes of the Trustees.

Mr. Shaw's expressed wish for the instruction of garden pupils has this year borne fruit in the completion of the gardening course by Mr. Homer Riggle, who was given a scholarship in the spring of 1890, and who on the completion of his studies at the Garden, was appointed to a gardener's position at the Ohio State University; and Mr. J. P. Pillsbury, who would have completed the course in March, 1895, has been appointed assistant to the Horticulturist of the Pennsylvania State College, and will probably apply for examination for a certificate in 1895, after completing the work required of garden pupils.

While the number of free scholarships contemplated by Mr. Shaw, and provided for in 1889, is limited to six, so many applications have been received for the admission to the garden classes of paying pupils, that at its meeting of November 16th, 1894, the Board of Trustees authorized the Director "to admit, in addition to those holding garden scholarships, as many suitably prepared garden pupils as can, in his judgment, be adequately taught without material increase in the cost of tuition, each pupil so admitted to be charged \$25.00 per year tuition, and to be entitled to the same certificate as a scholarship pupil on completion of the required course and examinations." In November, therefore, a sixth announcement was issued, stating that the vacancy caused by the withdrawal of Mr. Pillsbury would be filled in March next, by the appointment of a scholarship pupil, and that applications would be considered from persons desirous of entering the Garden next April as pupils without any of the scholarship grants or payments, and subject to the payment of a tuition fee of twenty-five dollars at the beginning of each class year.

To avoid unnecessary duplication of instruction both at

* Fifth Report, pp. 18, 19.

the Garden and the School of Botany, the course of study for garden pupils has been re-arranged as is shown in the appended table, so that the work of the third and fourth years may be given alternately to two combined classes, the second year's class work only being repeated each year.

COURSE OF STUDY.

YEAR.	TERM.	STUDIES.					PER WEEK.
SECOND.	April to June.	Floriculture. 3 exercises weekly.	Economic Entomology. 1 exercise weekly.		Surveying. 2 exercises weekly.		6
	July to Sept.	Floriculture. 3	Economic Entomology. 2	Book-Keeping. 1			6
	Oct. to Dec.	Floriculture. 1	Economic Entomology. 2		Surveying 1	Elementary Botany. 3	7
	Jan. to Mar.	Floriculture. 1	Twigs of Woody Plants. 1	Orchard Culture. 1	Landscape Gardening 1	Elementary Botany. 3	7
THIRD.	April to June.	Vegetable Gardening 4			Landscape Gardening 1	Elementary Botany. 2	7
	July to Sept.		Economic Mycology. 1	Orchard Culture. 2	Landscape Gardening 1	Botany of Garden Flowers. 2	6
	Oct. to Dec.		Economic Mycology. 3		Botany of Fruits. 2	Vegetable Physiology 1	6
	Jan. to Mar.		Economic Mycology. 3		Botany of Weeds. 1	Vegetable Physiology 2	6
FOURTH.	April to June.	Orchard Culture. 1	Forestry. 1	Book-Keeping. 1	Surveying and Drainage. 3		6
	July to Sept.	Small Fruit Culture. 4		Garden Accounts. 1		Botany of Vegetables 1	6
	Oct. to Dec.	Special Gardening 2	Forestry. 1	Garden Accounts. 1		Botany of Woody Plants. 2	6
	Jan. to Mar.	Special Gardening 2	Forestry. 1		Botany of House Plants. 2	Botany of Ferns. 1	6



OPUNTIAS IN THE CACTUS HOUSE.

The 75 class exercises per week here tabulated (each extending over three months), may be grouped under subjects as follows:—

Gardening:

Floriculture.....	8	
Vegetable gardening.....	4	
Fruit culture.....	8	
Forestry	3	
Landscape gardening	3	
Selected thesis work.....	4	30
Surveying and drainage.....		6
Bookkeeping and accounts.....		4
Economic entomology		5
Botany in its relation to gardening:		
General botany.....	8	
Botany of decorative plants.....	5	
Botany of hardy woody plants.....	3	
Botany of fruits.....	2	
Botany of vegetables.....	1	
Botany of weeds.....	1	
Economic mycology	7	
Vegetable physiology.....	3	30
		75

Subjects capable of being taught in the laboratory, the greenhouse, or the field, are so taught, and all of the theoretical instruction is expected to be practically tested in the performance of manual labor, to which the entire first year, and half of each day through the remainder of the course, is devoted. Vacations are granted from July 1 to 15, and December 21 to January 4, inclusive.

THE SCHOOL OF BOTANY.

On the opening of the college year 1894-5, the instructional force of the School of Botany was increased by the appointment of Mr. Orville L. Simmons as instructor in cryptogamic botany, Mr. C. H. Thompson continuing to act as general instructor. In the spring of 1894, a course of Saturday lectures and demonstrations in pollination and plant fertilization was given by me at the Garden to 33 persons, laboratory work was given to 3 teachers, and two

classes, including 45 children, were taught elementary botany at the Garden by Miss A. I. Mulford, through the same term. During the past autumn, Miss Mulford has further conducted two classes, consisting of 23 persons, in the study of ferns and of the fruits and seeds of flowering plants.

The appended list of electives now offered by its undergraduate department is taken from the forthcoming catalogue of Washington University.

1. Elementary Morphology and Organography, with reference to Oecology and Systematic Botany. Lectures and demonstrations by the Professor, as a full study through the first term.
2. Elementary Anatomy and Phanerogamic Botany. Laboratory work under the General Instructor, as a full study through the second term.
3. Synoptical study of the Cryptogams. Laboratory work under the Instructor in Cryptogamic Botany, as a full study through the first term, followed, if desired, by:—
4. A special study of some group of Cryptogams, as a full study through the second term.
5. Methods of Vegetable Histology. Laboratory work under the General Instructor, as a full course through the first term.
6. Histology and Morphology of the Higher Plants. Laboratory work under the General Instructor, as a full study through the second term, accompanied, if desired, by:—
7. A laboratory study of the minute anatomy of the lower Cryptogams, under the Instructor in Cryptogamic Botany, as a full course for the same term.
8. Technical Microscopy of Timbers. Laboratory work under the Professor, as a half course during the first term.

9. Economic Botany. Lectures by the Professor, supplemented by laboratory demonstrations by the Instructors, as a full course for the second term.
- 10-11. Applied Mycology. Laboratory work under the Instructor in Cryptogamic Botany, as a full course extending through the year.
- 12-13. Garden Botany. Laboratory study of cultivated plants, at the Botanical Garden, under the Director and his Assistants, for one or two terms.
14. Vegetable Physiology. Laboratory work under the General Instructor, as a full course for the first term.

It is intended that course 1 shall always be followed by course 2, the two being preparatory to other electives. For the present, unless special reason to the contrary exists, courses 1 and 2 only will be given each year, the remaining electives being offered in alternate years as follows: —

First year (as offered for 1894-5), —

First term, courses 1, 3, 12, and 14.

Second term, courses 2, 4, 9, and 13.

Second year (as offered for 1895-6), —

First term, courses 1, 5, 8, and 10.

Second term, courses 2, 6, 7, and 11.

Students who have taken courses 1 and 2, or have had their equivalent elsewhere, are admitted to any of the other elementary electives which can be taken without conflict with other University work; but students who desire to equip themselves as botanists are advised to take the electives as nearly as possible in the order in which they are offered, and on the completion of the elective courses should expect to devote not less than ten hours per week through an entire year to some piece of research work, selected under the advice of the Professor of Botany.

The instrumental, library and herbarium equipment of the School of Botany and the Garden are or can easily be made ample for the proper teaching of these electives. All of the courses capable of being taught in the laboratory are so taught, supplemented by necessary lectures and reading, and the few lecture courses offered are illustrated whenever possible by specimens of plants and their products.

In addition to these undergraduate studies, post-graduate work is planned to suit the needs of candidates for advanced degrees, and one applicant for the Doctor's degree is taking such work through the present year.

Besides the classes already mentioned, two advanced students have been more or less steadily occupied in herbarium work at the Garden through the year, several visiting botanists have made protracted use of the herbarium and library, and the Garden representatives of several difficult genera of plants have passed through the hands of specialists engaged in the revision of these groups; and it is intended that under needful restrictions all of the facilities of the Garden shall always be available for the use of any suitably prepared person engaged in botanical work.

Very respectfully,

WILLIAM TRELEASE,
Director.

January 9, 1895.